							OF NAT		ESOURCES MINING			AMEND	FOR		
		А	PPLICATION	FOR	PERMIT TO	DRILL					1. WELL NAME and N	UMBER Moon 2-	31C4		
2. TYPE OI	WORK	DRILL NEW WELL	. REEN	TER P&	A WELL	DEEPEN	WELL ()			3. FIELD OR WILDCA	T ALTAM	ONT		
4. TYPE OF	WELL				ed Methane V						5. UNIT or COMMUNITIZATION AGREEMENT NAME				E
6. NAME O	F OPERATOR				COMPANY, L.						7. OPERATOR PHONE	713 997	-5039		
8. ADDRES	S OF OPERAT	OR	1001 Louisia		,						9. OPERATOR E-MAI			om	
	AL LEASE NUM , INDIAN, OR S		1001 Louisia	110, 110	11. MINERA	L OWNERS	HIP				12. SURFACE OWNER		spenergy.c		
·		Fee OWNER (if box 12	- 'foo'\		FEDERAL	(_) INDI	IAN ()	STATI	FEE (III	2	FEDERAL IN 14. SURFACE OWNE	DIAN ()	STATE		E (D)
		`	Kenr	eth Al	ton Moon							435-738	-2526		
15. ADDRE	SS OF SURFA	CE OWNER (if bo	HC 64 Box 10)2, Dud							16. SURFACE OWNE	R E-MAIL	if box 12	= 'fee')	
	17. INDIAN ALLOTTEE OR TRIBE NAME if box 12 = 'INDIAN')					FORMATION (Submit Co	NS)	VERTICAL DI	RECTIONA	но	ORIZONT	AL 🔵
20. LOCA	20. LOCATION OF WELL						QT	R-QTR	SECTION	ON	TOWNSHIP	RA	NGE	МЕ	RIDIAN
LOCATION AT SURFACE 715					SL 776 FEL		S	SESE	31	<i>-</i>	3.0 S	4.0) W		U
Top of Uppermost Producing Zone 715				715 F	SL 776 FEL		S	SESE	31		3.0 S	4.0	0 W U		U
At Total	Depth			715 F	SL 776 FEL		S	SESE	31		3.0 S	0 W U			
21. COUN	ΤΥ	DUCHESNE			22. DISTAN	CE TO NEAF	REST LE		(Feet)		23. NUMBER OF ACR	ES IN DRIL		r	
						CE TO NEAR or Drilling o		oleted)	ME POOL		26. PROPOSED DEPT	H 10500	TVD: 1050	0	
27. ELEVA	TION - GROUN	ID LEVEL		1	28. BOND N	UMBER					29. SOURCE OF DRIL			PLICABL	E
		5467		1		400JU0708 Duchesne City									
String	Hole Size	Casing Size	Length			Hole, Casing, and Cement Information Weight Grade & Thread Max Mud Wt.				Cement		Sacks	Yield	Weight	
COND	20	13.375	0 - 80		54.5		LT&C	- III	8.8		Class G		1000	1.15	15.8
SURF	12.25	9.625	0 - 330	0	40.0	N-80	LT&C		9.5		35/65 Poz		439	3.16	11.0
											remium Lite High St		191	1.33	14.2
I1	8.75	7	0 - 743	4	29.0	P-110	0 LT&C	;	10.4		remium Lite High St remium Lite High St		259 91	1.91	12.0 12.5
L1	6.125	4.5	7234 - 10	500	13.5	P-110	0 LT&C	;	12.0		50/50 Poz	rengtii	194	2.0	12.0
						Α٦	TTACHI	MENTS							
	VEF	RIFY THE FOLLO	OWING ARE A	ATTAC	CHED IN AC	CCORDAN	CE WIT	TH THE (JTAH OIL ANI	GAS	CONSERVATION O	SENERAL	RULES		
₩	ELL PLAT OR M	AP PREPARED BY	LICENSED SUI	RVEYO	R OR ENGIN	EER		⊯ c	OMPLETE DRIL	LING P	PLAN				
I ✓ AFI	FIDAVIT OF STA	ATUS OF SURFACE	OWNER AGRE	EMEN	IT (IF FEE SU	RFACE)		FC	RM 5. IF OPER	ATOR	IS OTHER THAN THE L	EASE OWN	IER		
DIR	ECTIONAL SU	RVEY PLAN (IF DI	RECTIONALLY	OR HO	ORIZONTALL	Y DRILLED)		I ✓ TO	POGRAPHICAL	MAP					
NAME Maria S. Gomez TITLE Principal Regulator							nalyst			PF	IONE 713 997-5038				
SIGNATU	RE			DAT	E 07/21/201	2				EN	MAIL maria.gomez@epe	nergy.com			
	BER ASSIGNED 113515940			APPI	ROVAL				B	Dod	Right				
									P	ermi	t Manager				

Moon 2-31C4 Sec. 31, T3S, R4W DUCHESNE COUNTY, UT

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. <u>Estimated Tops of Important Geologic Markers</u>

<u>Formation</u>	<u>Depth</u>	
Green River (GRRV) Green River (GRTN1) Mahogany Bench L. Green River	3,284' 3,884' 4.584' 5,434'	
Wasatch T.D. (Permit)	7,334' 10,500'	

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

Substance	<u>Formation</u>	<u>Depth</u>
~	Green River (GRRV)	3,284'
	Green River (GRTN1)	3,884'
	Mahogany Bench	4,584'
Oil	L. Green River	5,434'
Oil	Wasatch	7,334'

3. Pressure Control Equipment: (Schematic Attached)

A 4.5" by 20.0" rotating head on structural pipe from surface to 800'. A 4.5" by 13 3/8" Smith Rotating Head and 5M Annular from 800' to 3,300' on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 3,300' to 7,434'. A 10M BOE w/rotating head, 5M annular, blind rams & mud cross from 7,434' to TD.

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi Annular will be nippled up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock, floor safety valves will be tested to 5M psi. The annular preventer will be

tested to 250 psi low lest and 4,000 psi high test. The 10M BOP will be installed with 3 ½" pipe rams, blind rams, mud cross and rotating head from intermediate shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision Rig # 406 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason monitoring systems with gas monitor 800'—TD.
- B) Mud logger with gas monitor 3,300' to TD
- C) Choke manifold with one manual and one hydraulic operated choke
- D) Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and de-silter, and centrifuge.

4. Proposed Casing & Cementing Program:

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations will be based on: 25% excess over gauge hole in the liner section, 10% excess over gauge hole in the intermediate section, and 75% excess on the lead and 50% excess on the tail over gauge hole volume for the surface hole. Actual volumes pumped will be a minimum of the volumes stated above, however, actual hole size will be based on caliper logs in the liner and intermediate sections. Gauge hole will be used for the surface section.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Туре	Mud Weight
Surface	WBM	8.8 – 9.5
Intermediate	WBM	9.5 – 10.4
Production	WBM	10.4 – 12.0

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program**:

Logs:

Mud Log: 3,300' - TD.

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from base of surface casing to TD.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,500' TD equals approximately 6,552 psi. This is calculated based on a 0.624 psi/foot gradient (12.0 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 4,242 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 10,900' = 5,947 psi

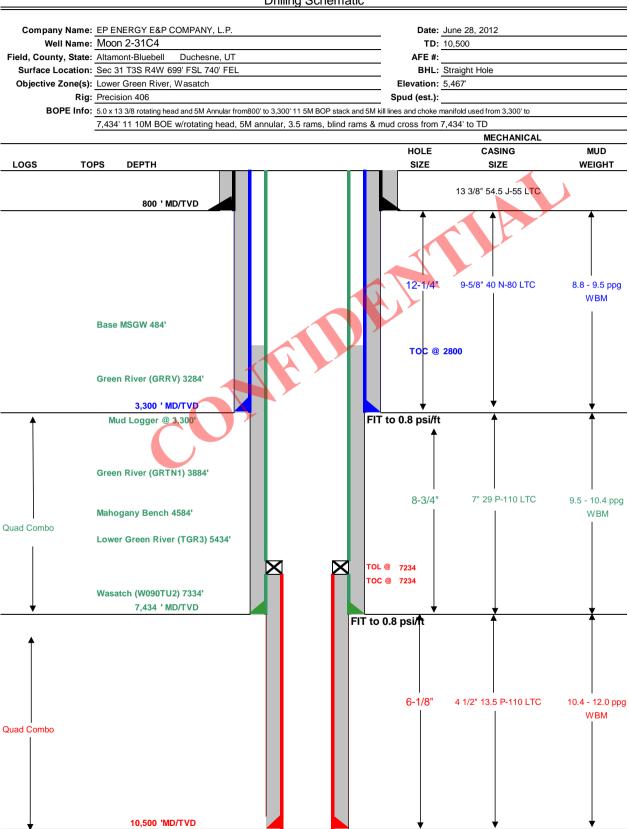
BOPE and casing design will be based on the lesser of the two MASPs which is 4,242 psi.

8. OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.

Page 1/2



Drilling Schematic



Page 2/2

DRILLING PROGRAM

CASING PROGRAM	SIZE	INTE	RVAL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	800	54.5	J-55	LTC	2,730	1,140	1,399
SURFACE	9-5/8"	0	3300	40.00	N-80	LTC	3,090	5,750	820
INTERMEDIATE	7"	0	7434	29.00	P-110	LTC	11,220	8,530	797
PRODUCTION LINER	4 1/2"	7234	10500	13.50	P-110	LTC	12,410	10,680	338

CEMENT PROGRA	M	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		800	Class G + 3% CACL2	1000	100%	15.8 ppg	1.15
SURFACE	Lead	2,800	Boral Craig POZ 35%, Mountain G 65%, Bentonite Wyoming 8%, Silicate 5 Ibm/sk, Pol-E Flake 0.125 lbm/sk, Kwik Seal 0.25 lb/sk	439	75%	11.0 ppg	3.16
SURFACE	Tail	500	Halco-light premium+3 lb/sk Silicate+0.3% Econolite+1% Salt+0.25 lbm/sk Kol-Seal+0.24 lb/sk Kwik Seal+ HR-5	191	50%	14.2 ppg	1.33
INTERMEDIATE	Lead	3,634	Hallco-Light-Premium+4% Bentonite+0.4% Econolite+0.2% Halad322+3 lb/sk Silicalite Compacted+0.8% HR-5+ 0.125 lb/sk Poly-E-Flake	259	10%	12.0 ppg	2.31
	Tail	1,000	Hallco-Light-Premium+0.2% Econolite+ 0.3% Versaset+0.2% Halad322+0.8% HR-5+ 0.3% SuperOBL+ 0.125 lb/sk Poly- E-Flake	91	10%	12.5 ppg	1.91
PRODUCTION LINER		3,266	Halco- 50/50 Poz Premium Cement+20% SSA-1+0.3% Super CBL+ 0.3% Halad- 344+0.3% Halad-413+ 0.2% SCR-100+ 0.125 lb/sk Poly-E-Flake + 3 lb/sk Silicat	194	25%	12.50	2.0

FLOAT EQUIPMENT & C	ENTRALIZERS
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring
CONDUCTOR	centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment.
SOIN ACE	Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment.
INTERMEDIATE	Maker joint at 8,000'.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S):	Joe Cawthorn	713-997-5929
MANAGER:	Tommy Gaydos	

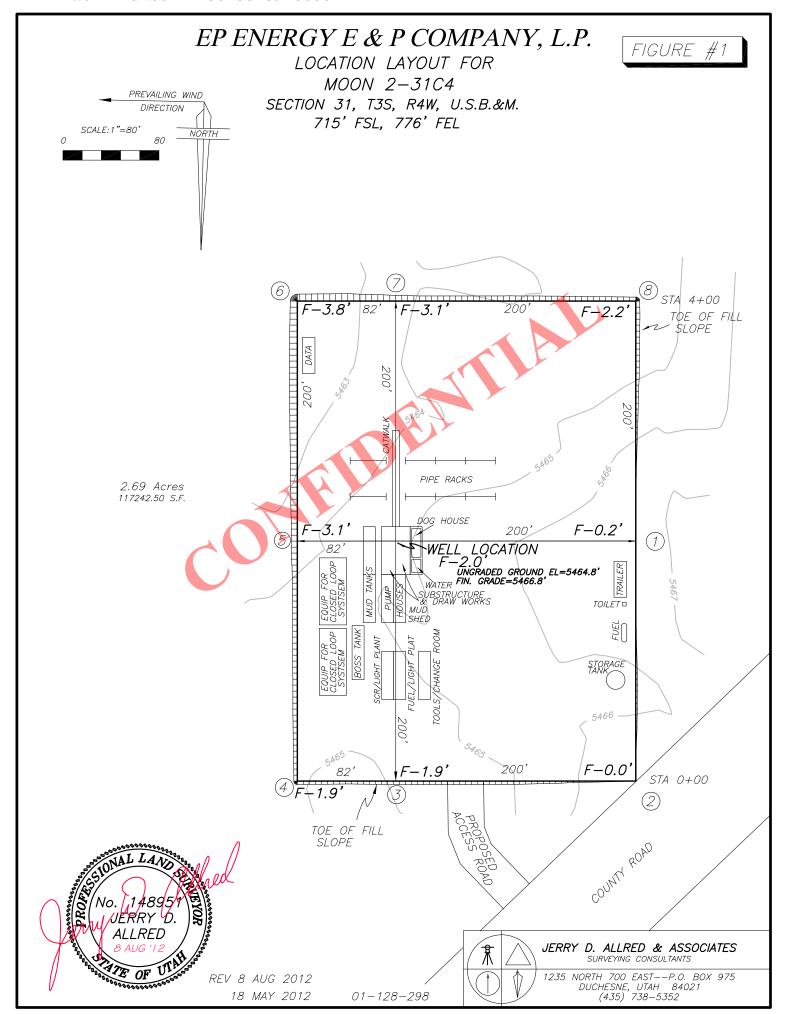
EP ENERGY E&P COMPANY, L.P. MOON 2-31C4 SECTION 31, T3S, R4W, U.S.B.&M.

PROCEED EAST ON PAVED STATE HIGHWAY 40 FROM THE INTERSECTION OF HIGHWAY 87 WITH U.S. HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 0.38 MILES TO AN INTERSECTION;

TURN LEFT AND TRAVEL EASTERLY AND THEN NORTHEASTERLY 1.40 MILES ON EXISTING COUNTY ROAD TO THE BEGINNING OF THE ACCESS ROAD;

TURN RIGHT ONTO THE ACCESS ROAD AND THE PROPOSED WELL LOCATION 0.03 MILES;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 1.81 MILES.



EP ENERGY E & P COMPANY, L.P.

FIGURE #2

LOCATION LAYOUT FOR

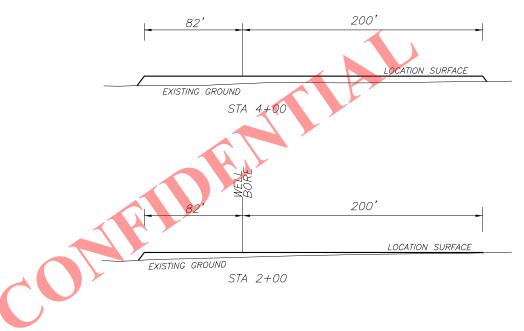
MOON 2-31C4

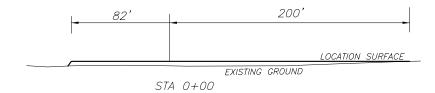
SECTION 31, T3S, R4W, U.S.B.&M.

715' FSL, 776' FEL



NOTE: ALL CUT/FILL SLOPES ARE 1½:1 UNLESS OTHERWISE NOTED





APPROXIMATE QUANTITIES

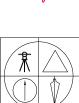
TOTAL CUT = 2171 CU. YDS.

 $\begin{array}{lll} \textit{PIT CUT} & = & \textit{O CU. YDS.} \\ \textit{TOPSOIL STRIPPING: (6")} & = & \textit{2171 CU. YDS.} \\ \textit{REMAINING LOCATION CUT} & = & \textit{O CU. YDS.} \\ \end{array}$

TOTAL FILL = 10,670 CU. YDS.

LOCATION SURFACE GRAVEL=1433 CU. YDS. (4" DEEP) ACCESS ROAD GRAVEL=36 CU. YDS.

ACCESS ROAD GRAVEL=36 CU. YDS.

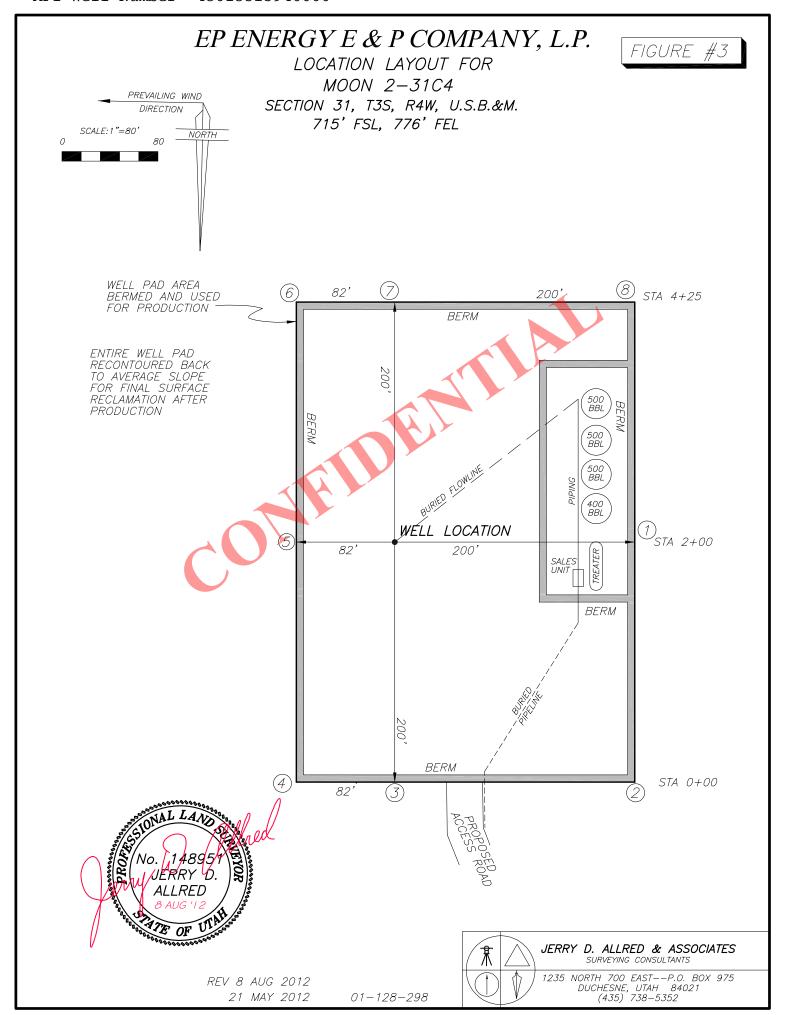


JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

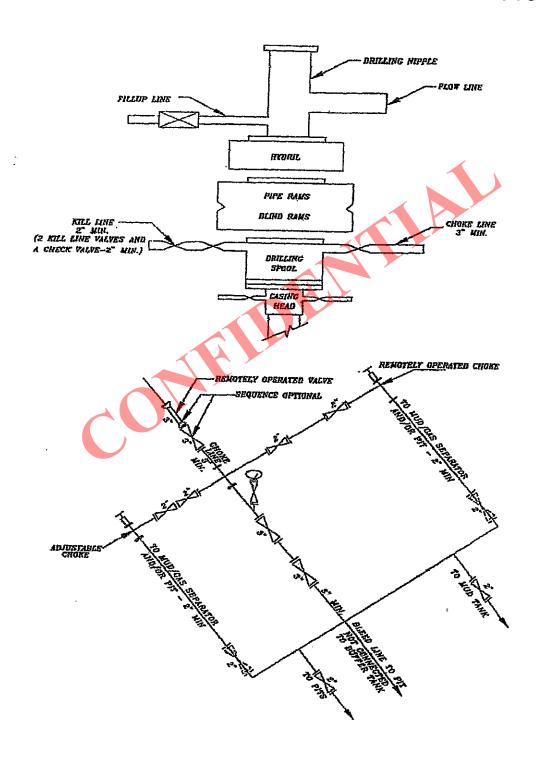
1235 NORTH 700 EAST——P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738—5352

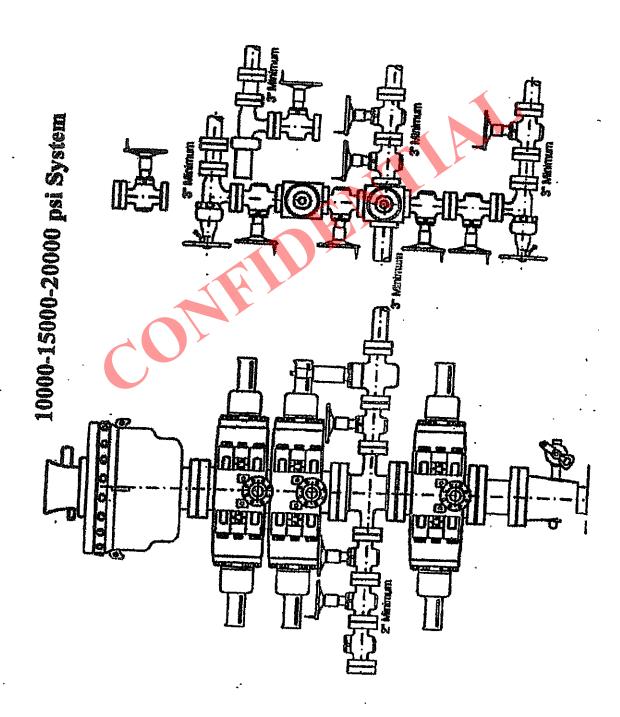
REV 8 AUG 2012 21 MAY 2012

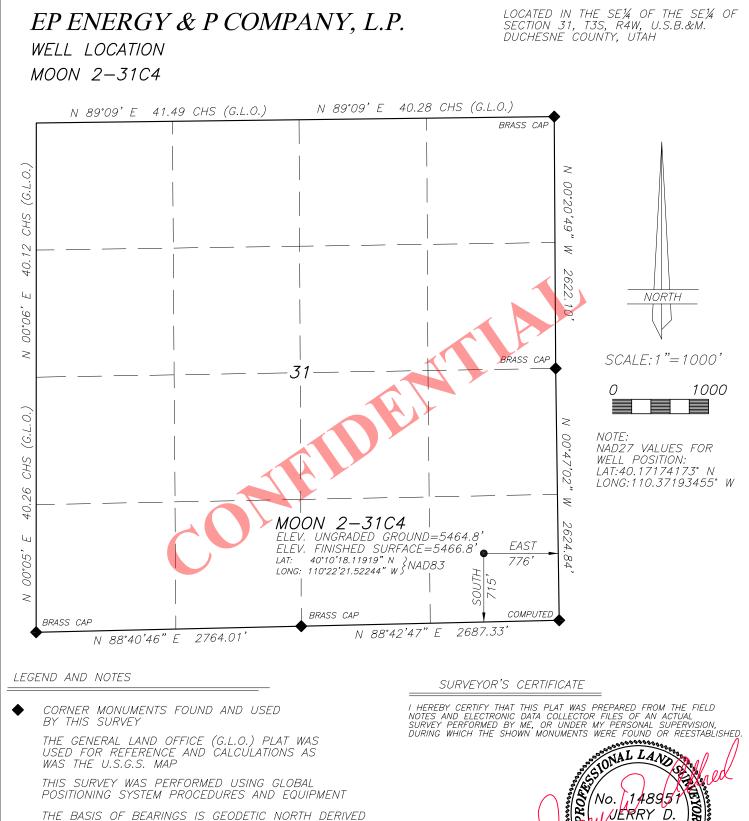
01-128-298



5M BOP STACK and CHOKE MANIFOLD SYSTEM





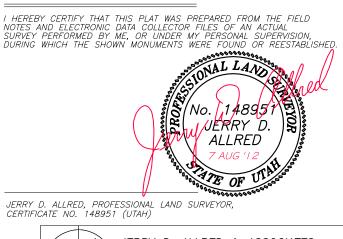


THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

BASIS OF ELEVATIONS: NAVD 88 DATUM USING THE UTAH REFERENCE NETWORK CONTROL SYSTEM

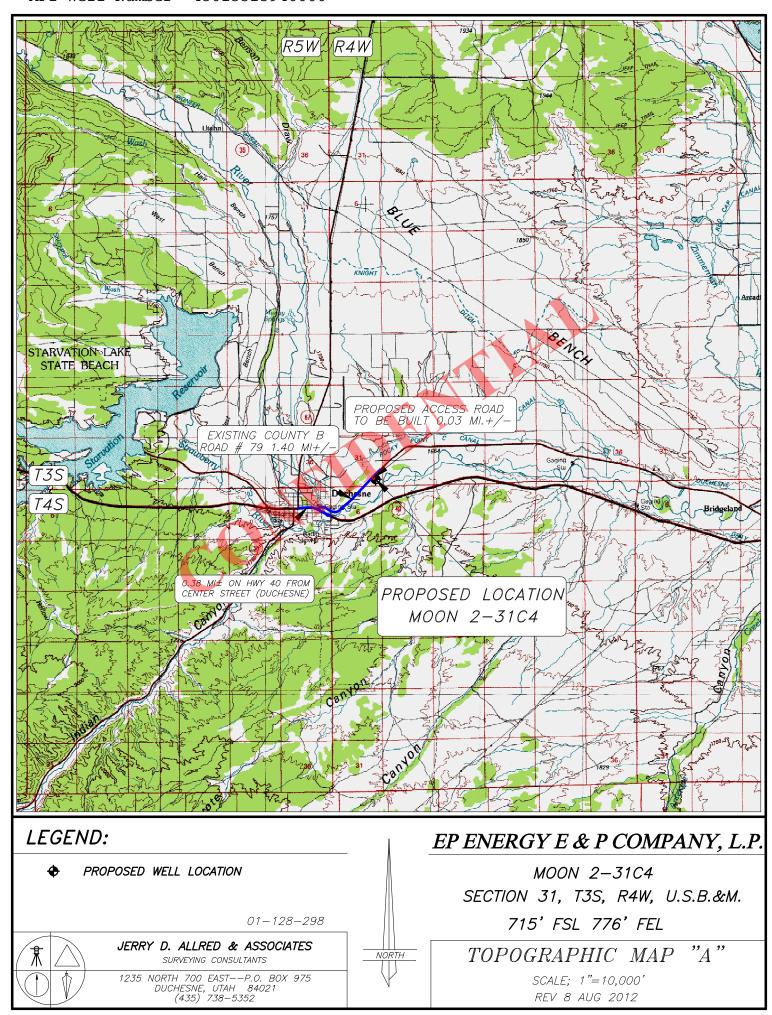
> REV 7 AUG 2012 18 MAY 2012

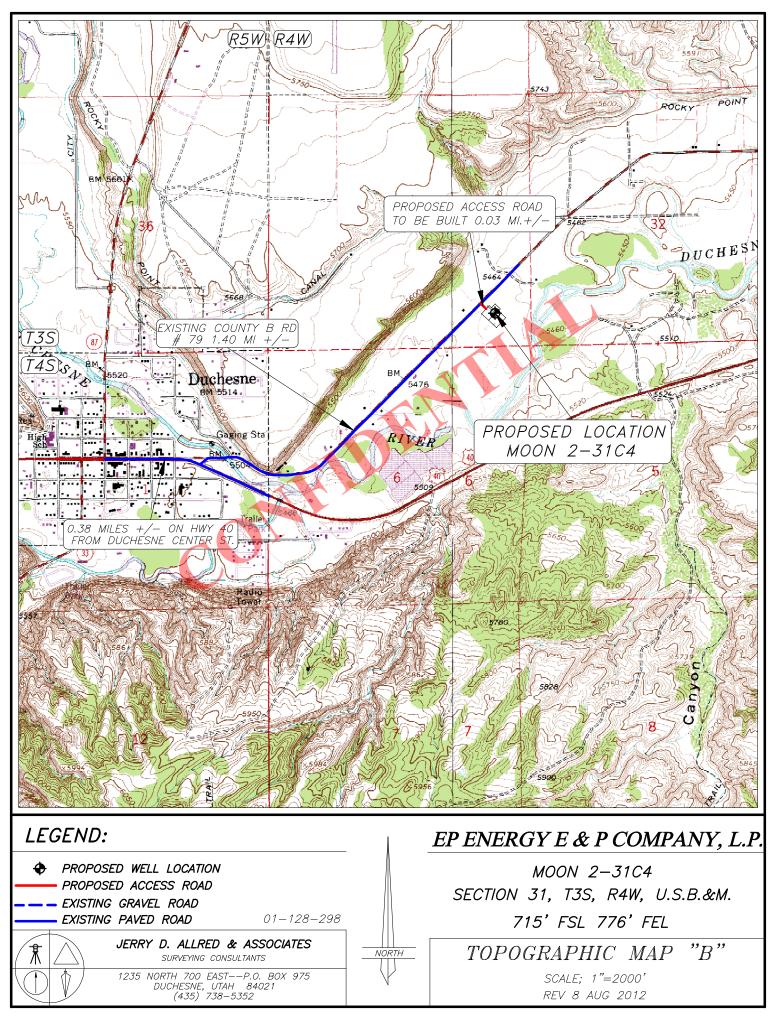
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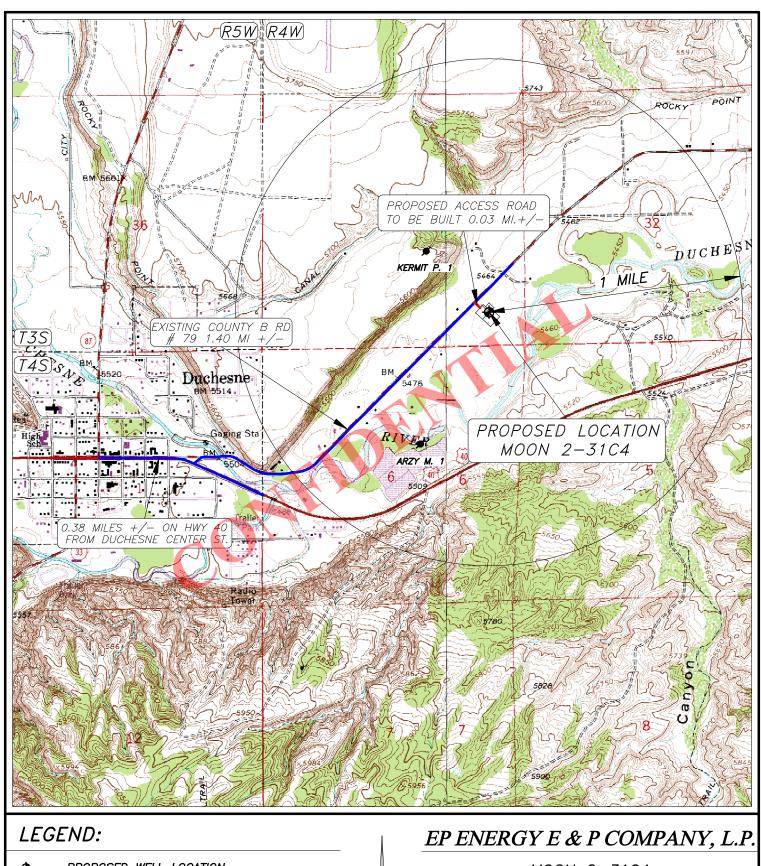


JERRY D. ALLRED & ASSOCIATES SURVEYING CONSULTANTS

1235 NORTH 700 EAST——P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738—5352







- PROPOSED WELL LOCATION
- **Ø** ○ OTHER WELLS AS LOCATED FROM SUPPLIED MAP

01-128-298



JERRY D. ALLRED & ASSOCIATES

SURVEYING CONSULTANTS

1235 NORTH 700 EAST——P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738—5352

MOON 2-31C4 SECTION 31, T3S, R4W, U.S.B.&M. 715' FSL 776' FEL

TOPOGRAPHIC MAP "C"

SCALE; 1"=2000' REV 8 AUG 2012

AFFIDAVIT OF SURFACE DAMAGE AND RIGHT-OF-WAY AGREEMENTS

Corie A. Mathews personally appeared before me, and, being duly sworn, deposes and says:

- 1. My name is Corie A. Mathews. I am a Landman for EP Energy E&P Company, L.P., whose address is 1001 Louisiana Street, Houston, Texas 77002 ("EP Energy").
- 2. EP Energy is the operator of the proposed Moon 2-31C4 well ("the Well") to be located in the SE/4 of the SE/4 of Section 31, Township 3 South, Range 4 West, USM, Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Drillsite location is Kenneth Alton Moon, whose address is HC 64 Box 102, Duchesne, Utah 84021 and whose telephone number is (435) 738-2526 (the "Surface Owner").
- 3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated October 23, 2012 to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling of the Well.
- 4. EP Energy and the Surface Owner have also entered into a Right-of-Way Agreement dated October 23, 2012 for an access road, pipeline and power line corridor across the SE/4 of the SE/4 of Section 31, Township 3 South, Range 4 West, USM, Duchesne County, Utah.

FURTHER AFFIANT SAYETH NOT.

Corie A. Mathews

ACKNOWLEDGMEN

STATE OF TEXAS

8 8

COUNTY OF HARRIS

This instrument was acknowledged before me on this the 27th day of 0, to be ..., 2012 by Corie A. Mathews as a Landman for EP ENERGY E&P COMPANY, L.P., a Delaware limited partnership, on behalf of said partnership and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

VI T. NGUYEN

Notary Public, State of Texas

My Commission Expires

August 03, 2013

Notary Public in and for State of Texas

API Well Number: 43013515940000 Application for Permit to Drill – State DOGM

Moon 2-31C4

Duchesne County, Utah

EL PASO E&P COMPANY, L.P.

Related Surface Information

1. <u>Current Surface Use:</u>

Livestock Grazing and Oil and Gas Production.

2. Proposed Surface Disturbance:

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately .03 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. Location Of Existing Wells:

Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. <u>Location And Type Of Drilling Water Supply:</u>

• Drilling water: Duchesne City Water

5. Existing/Proposed Facilities For Productive Well:

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor .03 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. Construction Materials:

 Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. Methods For Handling Waste Disposal:

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be place in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any
 hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a
 later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. Ancillary Facilities:

There will be no ancillary facilities associated with this project.

Moon 2-31C4

Duchesne County, Utah

9. Surface Reclamation Plans:

Application for Permit to Drill – State DOGM

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
 - 1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
 - 2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
 - 3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
 - 1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
 - 2. Landowner will be contacted for rehabilitation requirements.

10. Surface Ownership:

Kenneth Alton Moon HC 64 Box 102 Duchesne, Utah 84021 435-738-2526

Other Information:

- The surface soil consists of clay, and silt.
- Flora vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses Livestock grazing and mineral exploration and production.

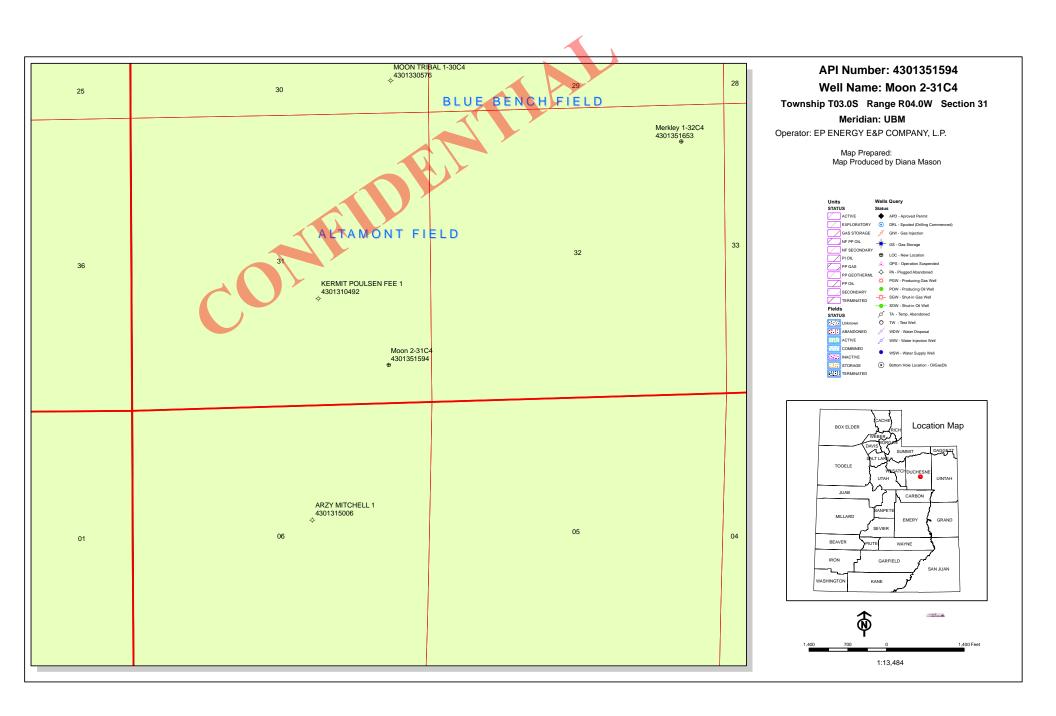
Operator and Contact Persons:

Construction and Reclamation:
El Paso E & P Company
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

Regarding This APD
El Paso E & P Company
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

<u>Drilling</u>

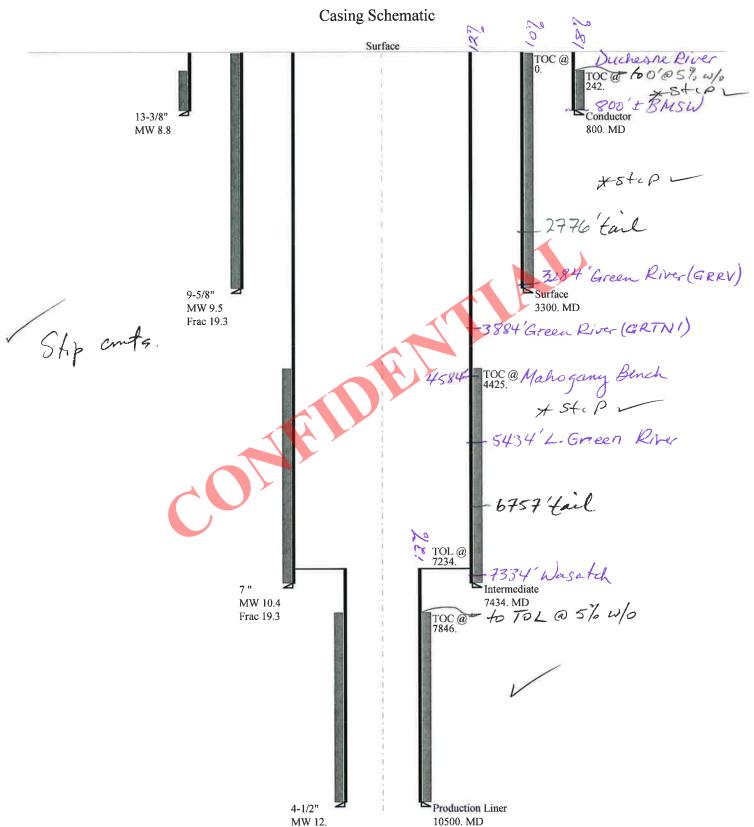
El Paso E & P Company
Joe Cawthorn – Drilling Engineer
1001 Louisiana, Rm 2523B
Houston, Texas 77002
713-997-5929 – office
832-465-2882 – Cell



BOPE REVIEW EP ENERGY E&P COMPANY, L.P. Moon 2-31C4 43013515940000

Well Name		EP ENERGY E&	P COMPANY, L.P.	Moon 2-31C4 43	01351594000	00	<u> </u>	
String		COND	SURF	11	L1		<u></u>	
Casing Size(")		13.375	9.625	7.000	4.500		<u>-</u>	
Setting Depth (TVD)		800	3300	7434	10500			
Previous Shoe Setting Dept	h (TVD)	0	800	3300	7434		Ħ	
Max Mud Weight (ppg)		8.8	9.5	10.4	12.0		Ħ	
BOPE Proposed (psi)		1000	1000	5000	10000		Ħ	
Casing Internal Yield (psi)		2730	5750	11220	12410			
Operators Max Anticipated	Pressure (psi)	6552			12.0]	
Calculations		COND St	ring	-	13.3	75	<u> </u>	
Max BHP (psi))52*Setting D	Depth*MW=	366	╗		
-					1000	=	BOPE Adec	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	IP-(0.12*Setti	ing Depth)=	270	╗	YES	rotating head
MASP (Gas/Mud) (psi)		Max BH	IP-(0.22*Setti	ing Depth)=	190	╡	YES	OK
]	=	-	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	etting Depth	- Previous Sh	oe Depth)=	190	7	NO	
Required Casing/BOPE Tes	st Pressure=				800		psi	
*Max Pressure Allowed @	Previous Casing	Shoe=			0	Ī	psi *Ass	umes 1psi/ft frac gradient
		GUDE G				2.5		
Calculations May PHP (noi)		SURF Sti		onth*MW	9.6 1630	25		
Max BHP (psi)	.052*Setting Depth*MW=					믝	POPE Ador	uate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	IP-(0.12*Setti	ing Denth)=	1001	=		
MASP (Gas/Mud) (psi)			IP-(0.22*Setti		1234	4	NO	rotating head + 5M annular
MASI (Gas/Muu) (psi)		Max Bh	1F-(0.22 Sent	ing Deptin)=	904	4	*Con Full I	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	etting Depth	- Previous Sh	ioe Depth)=	1080	=	NO I	OK
Required Casing/BOPE Tes					3300	#	psi	<u>on</u>
*Max Pressure Allowed @		Shoe=			-	=	-	umes 1psi/ft frac gradient
	Tevious susing !				800	_	P	ames iponit true gradient
Calculations		I1 Strii			7.0	00	"	
Max BHP (psi)		.()52*Setting D	epth*MW=	4020			
							BOPE Adec	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	IP-(0.12*Setti	ing Depth)=	3128		YES	
MASP (Gas/Mud) (psi)		Max BH	IP-(0.22*Setti	ing Depth)=	2385		YES	OK
						_	*Can Full I	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	<u> </u>	etting Depth	- Previous Sh	ioe Depth)=	3111		YES	OK
Required Casing/BOPE Tes					7434		psi	
*Max Pressure Allowed @	Previous Casing	Shoe=			3300		psi *Ass	umes 1psi/ft frac gradient
Calculations		L1 Stri	ng		4.5	00	"	
Max BHP (psi)		.()52*Setting D	epth*MW=	6552			
							BOPE Adec	quate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		Max BH	IP-(0.12*Setti	ing Depth)=	5292		YES	
MASP (Gas/Mud) (psi)		Max BH	IP-(0.22*Setti	ng Depth)=	4242		YES	OK
							*Can Full I	Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(S	etting Depth	- Previous Sh	ioe Depth)=	5877		YES	
Required Casing/BOPE Tes	st Pressure=				8687		psi	
*Max Pressure Allowed @	Previous Casing	Shoe=			7434		psi *Ass	umes 1psi/ft frac gradient

43013515940000 Moon 2-31C4



Well name:

43013515940000 Moon 2-31C4

Operator:

EP ENERGY E&P COMPANY, L.P.

String type:

Conductor

Project ID: 43-013-51594

Location:

DUCHESNE COUNTY

Minimum design factors: **Environment:**

1.125

Collapse

Mud weight: 8.800 ppg Design is based on evacuated pipe.

Design factor

H2S considered?

Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

85 °F 1.40 °F/100ft

Minimum section length:

100 ft

Burst:

Collapse:

Design factor

1.00 Cement top: 242 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

Design parameters:

270 psi

0.120 psi/ft 366 psi

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.70 (J) 1.60 (J)

Buttress: Premium:

1.50 (J) Body yield: 1.50 (B) Non-directional string.

No backup mud specified.

Tension is based on buoyed weight. Neutral point: 696 ft

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Cost (\$)
1	(ft) 800	13.375	54.50	J-55	ST&C	800	800	12.49	9926
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load (psi)	Strength (psi)	Design Factor	Load (psi)	Strength (psi)	Design Factor	Load (kips)	Strength (kips)	Design Factor
1	366	1130	3.090	366	2730	7.46	37.9	514	13.55 J

Prepared by: Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 30,2012 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 800 ft, a mud weight of 8.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Well name:

43013515940000 Moon 2-31C4

Operator:

EP ENERGY E&P COMPANY, L.P.

String type:

Surface

Design is based on evacuated pipe.

Project ID: 43-013-51594

Location:

Collapse

DUCHESNE COUNTY

Minimum design factors: **Environment:**

Collapse: Design factor

1.125

H2S considered?

Surface temperature:

No 74 °F

Bottom hole temperature: Temperature gradient:

120 °F 1.40 °F/100ft

100 ft Minimum section length:

Burst:

Design factor

1.00

1.70 (J) 1.60 (J)

1.50 (J)

1.50 (B)

Cement top:

Surface

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient:

Calculated BHP

Design parameters:

Mud weight:

2,381 psi 0.220 psi/ft

9.500 ppg

3,107 psi

Tension:

8 Round STC:

8 Round LTC: Buttress:

Premium: Body yield:

Non-directional string. 1.80 (J)

Tension is based on buoyed weight. Neutral point: 2,834 ft

Re subsequent strings:

Next setting depth: 7,434 ft Next mud weight: 10.400 ppg Next setting BHP: 4,016 psi Fracture mud wt: 19.250 ppg Fracture depth: 3,300 ft Injection pressure: 3,300 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(\$)
1	3300	9.625	40.00	N-80	LT&C	3300	3300	8.75	41992
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	1629	3090	1.897	3107	5750	1.85	113.3	737	6.50 J

Prepared

Remarks:

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 30,2012 Salt Lake City, Utah

Collapse is based on a vertical depth of 3300 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

43013515940000 Moon 2-31C4 Well name:

EP ENERGY E&P COMPANY, L.P. Operator:

Intermediate Project ID: String type: 43-013-51594

DUCHESNE COUNTY Location:

Design parameters: Minimum design factors: **Environment:**

Tension:

Collapse Collapse:

Mud weight: 10.400 ppg Design factor 1.125 Design is based on evacuated pipe.

Bottom hole temperature: 178 °F Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Burst:

Design factor

1.00 Cement top:

> 1.80 (J) 1.80 (J)

> 1.60 (J)

1.50 (J)

1.60 (B)

H2S considered?

Surface temperature:

Max anticipated surface

Burst

pressure: 4,235 psi

Internal gradient: 0.220 psi/ft Calculated BHP 5,871 psi

8 Round STC: 8 Round LTC: No backup mud specified. **Buttress:**

Premium: Body yield:

> Tension is based on air weight. Neutral point: 6,264 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 10,500 ft 12.000 ppg Next mud weight: Next setting BHP: 6,545 psi Fracture mud wt: 19.250 ppg Fracture depth: 7,434 ft

Injection pressure:

7,434 psi

Νo 74 °F

4,425 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	7434	7	29.00	P-110	LT&C	7434	7434	6.059	83949
Run Seq	Collapse Load (psi) 4016	Collapse Strength (psi) 8530	Collapse Design Factor 2.124	Burst Load (psi) 5871	Burst Strength (psi) 11220	Burst Design Factor 1.91	Tension Load (kips) 215.6	Tension Strength (kips) 797	Tension Design Factor 3.70 J

Prepared Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 30,2012 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7434 ft, a mud weight of 10.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Well name:

43013515940000 Moon 2-31C4

Operator:

EP ENERGY E&P COMPANY, L.P.

String type:

Production Liner

Project ID: 43-013-51594

Location:

DUCHESNE COUNTY

Environment:

Collapse

12.000 ppg Mud weight: Internal fluid density: 1.500 ppg Collapse:

Design factor 1.125

Minimum design factors:

H2S considered? Surface temperature:

No 74 °F 221 °F

Bottom hole temperature: Temperature gradient:

1.40 °F/100ft

Minimum section length: 1,000 ft

Burst:

Design factor

1.00

Cement top:

7,847 ft

7,234 ft

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

Design parameters:

4,235 psi 0.220 psi/ft

Tension: 6,545 psi

8 Round STC: 8 Round LTC:

Buttress: Premium: Body yield:

1.80 (J) 1.80 (J) 1.60 (J)

1.50 (J) 1.60 (B)

9,916 ft

Liner top: Non-directional string.

Tension is based on air weight. Neutral point:

Segment		Nominal		End	True Vert	Measured	Drift	Est.	
Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost	
(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(\$)	
3300	4.5	13.50	P-110	LT&C	10500	10500	3.795	18491	
Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension	
Load	Strength	Design	Load	Strength	Design	Load	Strength	Design	
(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor	
5727	10680	1.865	6545	12410	1.90	44.5	338	7.59 J	
	Length (ft) 3300 Collapse Load (psi)	Length Size (ft) (in) 3300 4.5 Collapse Collapse Load Strength (psi) (psi)	Length Size Weight (lbs/ft) 3300 4.5 13.50 Collapse Collapse Collapse Load Strength Design (psi) Factor	Length Size Weight Grade (ft) (in) (lbs/ft) 3300 4.5 13.50 P-110 Collapse Collapse Collapse Burst Load Strength Design Load (psi) (psi) Factor (psi)	Length Size Weight Grade Finish (ft) (in) (lbs/ft) 3300 4.5 13.50 P-110 LT&C Collapse Collapse Collapse Burst Burst Load Strength Design Load Strength (psi) (psi) Factor (psi) (psi)	Length Size Weight Grade Finish Depth (ft) (in) (lbs/ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft) (Length (ft)Size (in)Weight (lbs/ft)Grade (reft)Finish (ft)Depth (ft)Depth (ft)33004.513.50P-110LT&C1050010500CollapseCollapseBurstBurstBurstTensionLoad (psi)Strength (psi)Design (psi)Load (psi)Design (psi)Load (kips)	Length (ft)Size (in)Weight (lbs/ft)Grade (lbs/ft)Finish (ft)Depth (ft)Depth (ft)Diameter (ft)33004.513.50P-110LT&C10500105003.795CollapseCollapseCollapseBurstBurstBurstTensionTensionLoadStrengthDesignLoadStrengthDesignLoadStrength(psi)(psi)Factor(psi)Factor(kips)(kips)	LengthSize (ft)Weight (lbs/ft)Grade (lbs/ft)Finish (ft)Depth (ft)Depth (ft)Diameter (ft)Cost (in)33004.513.50P-110LT&C10500105003.79518491Collapse Load Strength (psi)Collapse Design (psi)Collapse Design (psi)Burst Design (psi)Burst Design Design (psi)Tension Design (psi)Tension Design (kips)

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 30,2012 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 10500 ft, a mud weight of 12 ppg An Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator EP ENERGY E&P COMPANY, L.P.

Well Name Moon 2-31C4

API Number 43013515940000 APD No 6467 Field/Unit ALTAMONT

Location: 1/4,1/4 SESE **Sec** 31 **Tw** 3.0S **Rng** 4.0W 715 FSL 776 FEL **GPS Coord (UTM)** 553428 4446999 **Surface Owner** Kenneth Alton Moon

Participants

First presite Ken Moon was attended by the landowner, move stakes and new cut and fill sheets, second presite: Wayne Garner (E&P Energy); Dennis Ingram (DOGM)

Regional/Local Setting & Topography

The Moon 2-31C4 is proposed in northeastern Utah along the Duchesne River corridor and on the northern valley floor approximately seven hundred feet north of the river. Access into this well site is 1.40 miles east of the town of Duchesne and along the old highway or river road, which is a class B road. The topography at the proposed well pad is river bottom property that slopes southerly to the Duchesne River, and is croplands with alfalfa stands and sprinkler wheel lines in every direction. The Duchesne River corridor runs in a easterly fashion just south of the proposed project; the Strawberry River drains into the Duchesne just east of town or approximately 1.2 miles west of this well staking. The elevation rises approximately five to seven hundred feet to the north as the broken ridges leave the river bottom join the lower or southern portions of Blue Bench.

Surface Use Plan

Current Surface Use

Agricultural Grazing Wildlfe Habitat Residential

New Road Miles Well Pad Src Const Material Surface Formation

0.03 Width 282 Length 400 Offsite UNTA

Ancillary Facilities N

Closed loop mud system

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands Y

Duchesne River down slope of location approximately 700 feet

Flora / Fauna

Alfalfa and hay field with sprinkler system in place......

Mule Deer, elk, mountain lion, black bear, coyote, fox, raccoon, skunk, rabbit and other smaller mammals and bird life native to region and river bottom country.

RECEIVED: November 08, 2012

Soil Type and Characteristics

Brown to tan, fine grained sandy loam with some clays present

Erosion Issues Y

Sedimentation Issues Y

Site Stability Issues N

Operator will need to bring in several feet of road base or fill to stabilize surface, as the underlying lands may well be wet.

Drainage Diverson Required? N

Berm Required? Y

Berm location and tanks

Erosion Sedimentation Control Required? Y

Seed berms and slopes around this location after the drilling project is complete to prevent sediment from out washing onto crop lands.

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources? N

Reserve Pit

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)
Distance to Surface Water (feet)
Dist. Nearest Municipal Well (ft)
Distance to Other Wells (feet)
Native Soil Type
Fluid Type
Drill Cuttings
Annual Precipitation (inches)
Affected Populations
Presence Nearby Utility Conduits

Final Score

Sensitivity Level

Characteristics / Requirements

Closed loop mud system, one time permission to move solids and cuttings north onto the Moon 1-14C4 because of limited space and cropland. Surface has the same landowner.

Closed Loop Mud Required? Y Liner Required? Liner Thickness Pit Underlayment Required?

Other Observations / Comments

RECEIVED: November 08, 2012

Ken Moon the landowner, did not have a landowner agreement in place but is now working with the operator to obtain one, operator claims the agreement is in Moon's hands. Moved staking to assist landowner with sprinkler system, narrow same, closed loop system because of river and sub-surface water, two presite visits were made, operator obtained sign off from residents in the area to move well under the 660 foot mandate by the county, the Division approved moving dray cuttings from this well to another Moon well to the north and out of the Duchesne River flood plain, which is a one time deal for this well only.

Dennis Ingram **Evaluator**

10/12/2012

Date / Time



Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type		Surf Owner	CBM
6467	43013515940000	LOCKED	OW		P	No
Operator	EP ENERGY E&P COMPANY	Y, L.P.	Surface Owner-APD		Kenneth Alton Moon	
Well Name	Moon 2-31C4		Unit			
Field	ALTAMONT		Type of Work		DRILL	
Location	SESE 31 3S 4W U	715 FSL 7	776 FEL GPS Coord	1		
Lucation	(UTM) 553411E 44469	98N				

Geologic Statement of Basis

El Paso proposes to set 800 feet of conductor and 3,000 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 800 feet. A search of Division of Water Rights records indicates that there are over 30 water wells within a 10,000 foot radius of the center of Section 31. These wells mostly produce water from alluvium associated with the Duchesne River with the deeper wells producing from the Duchesne River Formation. Depths of the wells fall in the range of 12-370 feet. Depth is not listed for 3 wells. The wells are listed as being used for irrigation, stock watering, municipal, geothermal and domestic. The proposed drilling, casing and cement program should adequately protect the highly used Duchesne River aquifer.

Brad Hill 10/29/2012
APD Evaluator Date / Time

Surface Statement of Basis

Three or more visits were made to this proposed wellsite to address issues regarding the construction and drilling of this well. On the first visit the landowner attended and had not entered into a landowner agreement. E&P Energy agreed to move the well northwest so the location will match the sprinkler system wheel line and reduce impact to his alfalfa field. The operator also had to obtain a wavier from landowners from the north because of the 660 foot minimum distance from well center to residential housing, which was done. The Division also disallowed a reserve pit on this location, and so a closed loop mud system will be mandated; the Division also gave the operator one time permission to remove any and all dry cuttings from the wellbore to the Moon 1-14C4 because of ground water at this location and limited space. The surface at the Moon 1-14C4 is also owned by Ken Moon.

The location surface is presently alfalfa field and location less than 700 feet from the Duchesne River, which is on the down slope of this topography. Therefore, the operator shall utilize a closed loop mud system and not dig any pits. Berming around this site shall be adequate to assure the Division that spills shall not leave the location, low berms will result in a Notice of Violation. Noise levels shall be monitored to reduce complaints by farmers living in the area, along with limits on unnecessary night time activity. A Geo netting liner shall be placed under the location surface before the road base or sill in brought in. Road base or fill shall be brought in (and compacted) to build up a stable pad to support the drilling rig. The operator plans to drill this well over the winter, and should have this well on production before the crop season to limit impact on the landowner.

RECEIVED: November 08, 2012

The operator might want to install location berming similar to the Cabinlands 2-16B3 that will be more permanent and not tend to erode and wash out because of the wheel line sprinkler system by the landowner. The location and protection of the Duchense River rises above any expense concerns by the Division.

Dennis Ingram 10/12/2012
Onsite Evaluator Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition			
Pits	A closed loop mud circulation system is required for this location.			
Surface	The well site shall be bermed to prevent fluids from leaving the pad which will drain toward the Duchesne River			
Surface	Fill or road base brought in and compacted to support drilling rig in lands that most likely hav underlying water, and on the edge of wet lands.			
Surface	underlying water, and on the edge of wet lands. The operator shall limit noise levels and reduce unnecessary night time activity.			

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/21/2012 API NO. ASSIGNED: 43013515940000

WELL NAME: Moon 2-31C4

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850) PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: SESE 31 030S 040W Permit Tech Review:

> **SURFACE: 0715 FSL 0776 FEL Engineering Review:**

> **BOTTOM: 0715 FSL 0776 FEL** Geology Review:

COUNTY: DUCHESNE LATITUDE: 40.17166

LÓNGITUDE: -110.37271 UTM SURF EASTINGS: 553411.00 NORTHINGS: 4446998.00

FIELD NAME: ALTAMONT LEASE TYPE: 4 - Fee

PROPOSED PRODUCING FORMATION(S): GREEN RIVER-WASATCH **LEASE NUMBER:** Fee

SURFACE OWNER: 4 - Fee **COALBED METHANE: NO**

RECEIVED AND/OR REVIEWED:

LOCATION AND SITING:

R649-2-3. ✓ PLAT

Bond: STATE - 400JU0708 Unit:

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit**

Board Cause No: Cause 139-90 Water Permit: Duchesne City

Effective Date: 5/9/2012 **RDCC Review:**

Siting: (4) Producing Grrv-Wstc Wells in Sec Drl Unit **Fee Surface Agreement**

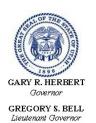
Intent to Commingle R649-3-11. Directional Drill

Commingling Approved

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill

8 - Cement to Surface -- 2 strings - hmacdonald 13 - Cement Volume Formation (3a) - hmacdonald



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Moon 2-31C4 API Well Number: 43013515940000

Lease Number: Fee

Surface Owner: FEE (PRIVATE) Approval Date: 11/8/2012

Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-90. The expected producing formation or pool is the GREEN RIVER-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 2800' MD in order to adequately isolate the Green River formation.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
 - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
 - Requests to Change Plans (Form 9) due prior to implementation
 - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
 - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Annuared Dr.

Approveu by:

For John Rogers Associate Director, Oil & Gas



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

January 8, 2014

EP Energy E&P Company, L.P. 1001 Louisiana Street RM 2038D Houston, TX 77002

Re:

APD Rescinded – Moon 2-31C4, Sec. 31, T.3, R.4W, Duchesne County, Utah API No. 43-013-51594

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on November 8, 2012. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective January 8, 2014.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc:

Well File

Brad Hill, Technical Service Manager

